GUIDELINES FOR WRITING CONTRIBUTION ASSESSMENTS

Introduction

Contribution assessments have varied widely among directorates and raters. The following examples are given to improve the quality and consistency of contribution assessments write-ups.

These examples along with the accompanying comments are intended to illustrate how contribution can be captured in the comments in order to fully and clearly state employees' contribution. The examples are NOT intended to represent benchmarks of contribution. Before getting to the specific examples, let's review a few key points about contribution assessment.

First, it is essential that supervisors and employee alike understand the local organizational mission, the directorate's mission, and AFRL's mission as a whole. It is equally important that contribution expectations are effectively communicate these to all employees. One of the by-products of CCS over time will be to focus and sharpen our awareness on the mission. If you are unclear on your local mission, you should consult your chain of management before beginning the assessment process.

Second, a key guideline to follow when writing / reviewing contribution inputs for CCS is the "So what?" test. Ask yourself: "Does the activity have an impact on achieving our purpose? If so, what is the specific impact?" If you cannot reasonably answer these questions, then that particular activity may not really represent contribution. Remember under CCS, we're not measuring busy-ness; instead, we're measuring results related to the mission. If a contribution statement leaves you with the question, "So what?" you probably need to clarify how the results relate to the mission.

Third, do not presume implicit contribution on the merits of an activity alone. For example, stating, "Sam published three technical journal articles during this assessment period." implies a contribution but does not state one. Actually, there are two problems here: One, the implication of contribution itself may not hold when measured against specific organizational objectives (were Sam's papers on a relevant topic? Did they advance the objectives of our group?) And the other is that even if the activity accurately implies contribution, the lack of explanation leaves the statement ambiguous; an outside observer may not be able to see the correlation between activity and contribution. The problem is only made worse when the activity is highly technical or very narrowly focused on subject matter for which the "insider group" is small. A more complete statement of contribution might be, "This year, Sam published three technical journal articles on <technical subject> which resulted in <some desired advancement in the technology> in direct support of our mission to <specify goal>." Good documentation of contribution like this stands on its own. It facilitates discussion in the meeting of managers and serves as a permanent record of the contribution.

Finally, supervisors and employees are encouraged to broadly interpret the factor descriptors. It is important to remember that when assessing contribution, an activity may apply to several contribution factors. A contribution in an individual factor is not necessarily represented by a discrete activity; it may be but one facet of the activity.

Examples by Factor

Let's look at some specific examples of contribution statements from past year's assessments. Again, these statements are not intended to represent employee benchmarks—just examples of well (or poorly) written contribution statements. In order to reinforce this idea, they are presented in order of increasing contribution, from Broadband Level I to Broadband Level IV, without identifying a specific level for each

statement. The words "activity" and "impact" do not have to be stated but the statement should clearly show the impact of the activity.

In many cases, the examples presented have been edited to enhance clarity and to maintain anonymity. Comments have been added in some examples to emphasize important points.

Factor: Communication & Reporting – Some Good Examples

Activity: Developed and presented scientific briefings related to R&D to the Scientific Advisory Board and Laboratory Director.

Impact: Laudatory praise and increased advocacy from the Lab for those programs.

Although general in nature, this statement clearly identifies a cause-effect relationship for the contribution. It states what the employee did, and ties it to a mission-related result.

Activity: Wrote detailed report of analysis of XYZ samples for a Tri-Service Toxicology Team **Impact:** Allowed them to make accurate assessment of the role of XYZ in contaminating workers.

Activity: Provided written input to NATO working party report on <technical subject>

Impact: Fostered international coordination of U.S. R&D in this subject area.

Activity: Wrote sources sought synopsis for major division procurement

Impact: Enabled planned procurement milestones to be met.

Activity: Managed Branch-X's presentation for the Buy Plan this year. The plan showed the complete listing of viewgraphs that were required, and showed what emphasis areas were to be presented, and who was responsible for each.

Impact: Allowed team members to see how their parts fitted into the entire presentation, and the importance of the viewgraphs they were preparing.

Activity: Generated post-test quick-look data plans for the XYZ test.

Impact: Resulted in immediate confirmation of vehicle performance and test success at the T+1 hour review.

Activity: Contributed major and significant portions to XYZ program technical and programmatic briefings, test plans and final reports

Impact: Allowed key customers and management officials to be kept appraised of status and milestones within this high-priority program. An employee does not have to be the lead individual on a project to communicate.

Activity: Co-authored key decision criteria for overall laboratory reorganization

Impact: Resulted in an evaluation matrix which objectively evaluated reorganization proposals. This individual received significant praise from the lab executive director for this work. Recognition for work is not itself a measure of contribution, but it does add weight to the importance of the results.

Activity: Filed invention disclosure describing a laser-based approach for continuous, noninvasive, nondestructive, near-real-time quantification of <technical subject>.

Impact: The technique provides researchers with data essential for developing advanced fuels, fuel additives, and thermal management methodologies in a fraction of the time and at a fraction of the cost associated with other techniques.

Activity: Acting as branch chief, encouraged branch S&E's to publish at technical conferences **Impact:** Resulted in publication of numerous papers and journal articles which advanced the mission of the branch. Supervisors can take credit for the role they play in supporting and mentoring their employees.

Activity: Developed and instituted a formal agreement between the Laboratory and ASC **Impact:** Defined the long-term working relationship, concept of operations, and roles and responsibilities. This agreement became the model for all future ASC mission-area organizations doing business with the Laboratory.

Factor: Communication & Reporting – Some Not-So-Good Examples

Contributed to 20+ technical publications/presentations. Papers – 19 total / 2 as primary author. Numerous presentations. These statements are just a laundry list of authoring activity on the part of the employee. Although you may feel that the contribution in this is implicit, it should still be explicitly stated. Without that, there is no way to know if the papers/presentations were on relevant topics that further the mission of the organization to which the employee belongs. It also makes it harder for upper management reviewers to relate the contribution to the mission if left unexplained.

Five technical papers were published in 1997. Two of these were on GPS receivers published in the National and International Technical meetings. *This statement doesn't pass the "So what?" test. Even the meetings at which the presentations were made are not identified.*

Authored article on <technical subject> in <named> Journal. Co-authored three technical papers for international symposia. Two have been submitted for journal publication. Co-authored two abstracts for forthcoming technical conferences: presented reviews of XYZ project at <named technical consortium> annual meeting and at <named peer review panel>. Gave presentations to distinguished visitors to our branch on our basic ABC/DEF programs. Conducted technical management [review] for basic ABC/DEF tasks in the XXXX branch.

Managed the in-house and contractor XYZ team at the <specified test site>. Planned and directed XYZ experiments at both the <specified test site> and <a second test site>. Mentored one on-site Ph.D. candidate and one Palace Knight student at <specified university>. This statement relies too much on "implied" contribution.

Peer reviewed pubs (co-author-3). Invited reviews (author-1, co-author-1). Submitted peer review pubs (co-author-2). Abstracts (autor-1, co-author-4). Invited lectures-2. Other, as listed in detailed descriptions below. [Followed by <u>lengthy</u> bibliography of publications]... In addition to having the problems mentioned above, this statement was excessively lengthy. A much better way of presenting this employee's apparently substantial contribution by publishing scientific papers might have read, "Employee published numerous technical articles in the areas of list of pertinent technical topics> that advanced the organization's mission by <state goal(s)>."

Factor: Teamwork and Leadership – Some Good Examples

Activity: Performed duty as the ASTARS focal point for the branch

Impact: Saved time and effort on the part of all S&E's with ASTARS reporting requirements. Here is a great example of how "extra duty assignments" contribute to the mission.

Activity: Implemented a divisional policy of "peer review" of research products

Impact: Resulted in the highest quality technical reports, plans, MOA's, etc., being delivered to the division's customers.

Activity: Served as Acting Chief during several extended periods... while maintaining all other activities including contract management and in-house R&D efforts.

Impact: Ensured the continued productivity of the WXYZ branch.

Activity: Inspired cooperation among diagnostics-development teams made up of AF personnel, contractors, and representatives from academia and industry.

Impact: Maximized productivity of the group. This statement shows that even the more intangible kinds of contribution can be explicitly cited.

Activity: Hosted and directed the research activities of several high school and graduate school students as well as university faculty members through AFOSR sponsored summer research programs. **Impact:** As a result, one such individual is addressing Air Force technology needs as an on-site contractor and another has joined the organization as a National Research Council Postdoctoral Research Associate.

Activity: Supervisor did not follow through on procedures for documenting a CIP.

Impact: As a result, appropriate adverse action procedures against the employee cannot move forward. This situation resulted in upper-level management involvement and increased workloads for the civilian personnel office that could have been avoided. This statement was not a part of last year's data; it was added to illustrate two important points. First, assessment statements do not always have to justify positive contribution; they can in fact also document shortcomings. Second, failure to carry out supervisory responsibilities that result in a negative impact on the organization can and should result in a lower score in this factor and be documented here accordingly.

Activity: Positively represented Air Force research work through participation in numerous science and engineering outreach activities as judge and mentor.

Impact: These extra efforts will produce long term benefit by attracting fresh young talent into research careers within the laboratory. Even the most nebulous contributions can be effectively cited if the supervisor broadly interprets the factor descriptors!

Factor: <u>Teamwork and Leadership</u> – Some Not-So-Good Examples

Led a 50-person integration effort for <technical project>. Served on several <technical subject> sub-IPTs. Has cooperated with other lab efforts in the area of laser development, facilities, and sensor development.

Employee cooperated in the presentation and planning of both basic and applied research and development. Personally coordinated the R&D efforts of several researchers.

Managed the in-house and contractor XYZ team at the <technical facility>.

Factor: Corporate Resource Management – Some Good Examples

Activity: Pursuing high-payoff activities and declined ones that distract from assigned work.

Impact: Managed his time effectively

While very general in nature, this statement credits the employee with effectively using a principal corporate resource: the value of his time and effort.

Activity: Handled timely procurement actions for DARPA

Impact: Resulting in \$2M in new contracts and associated reimbursable salary and travel funds being brought into the organization.

Activity: While at <external organization> this employee was a leading force in defining, developing, and implementing a successful strategy to align <that organization> along mission areas.

Impact: Resulting in improved focus on the war fighter. <The employee> is also credited with leading efforts to incorporate the AF modernization planning process, which for the first time, directly connects the Laboratory, AF MAJCOMs, and program office representatives in a complete and orchestrated "system of

systems" approach to acquisition... This is an excellent example of contribution while serving outside the laboratory environment.

Activity: Employee initiated in seeking outside work

Impact: His branch received critical FAA endorsements for OSD-sponsored projects to be conducted within this division.

Activity: This employee utilized an extensive network of contacts throughout the facility **Impact:** Insured that experimental equipment and resources would be available on schedule for in-house research critical to the branch.

Factor: Corporate Resource Management – Some Not-So-Good Examples

Task manager for XXX. Manager for Task <123> on engineering services contract. Coordinates daily operation of the YYY as principal investigator... Statements should not be so cryptic. Even for highly classified work, a clear statement as to the unclassified outcome of the work in terms of contribution should be spelled out.

Maintain equipment to ensure that all the analytical equipment is up and operational at all times.

Advocated to <a funding agency> on budgetary and programmatic issues for resources.

Manage and allocates funds for in-house and on-site contractual research.

Factor: R&D Business Development - Some Good Examples

Activity: Contacted several customers during ATD process to introduce them to <acronym> technology. **Impact:** Consequently, we were able to successfully integrate AF high-altitude efforts into the Navy's DTO for <another project acronym>. This joint effort secured approximately \$250K in extramural funding for FY98. *The classic case of contribution in this factor: an activity that brings in research funds.*

Activity: Worked to establish customer alliances with <other AF laboratory organization> in the area of solar cell technology.

Impact: Translated customer needs for <acronym> detector technology for space applications into a high-payoff program in <specific technical area>.

Activity: Analyzed old liquid propellants for reutilization or re-distillation.

Impact: As a result of the analysis, the AF was able to save in two ways: existing fuels could be used in place of purchasing new fuel and costly hazardous waste disposal could be avoided. Fuel reutilization resulting from this work resulted in estimated operational cost reductions of 10-20 times the cost of turning in the old fuel for waste disposal. Aside from saving money, high profile technical successes contribute to the organization by increasing it's prestige in the technical community.

Activity: Successfully led the team that developed a \$1.5M rotary rig for the vertical wind tunnel facility. **Impact:** This new capability has enabled our organization to capture test programs in support of the joint strike fighter and the <DoD-external> program. Leveraging internal R&D with external programs represents another classic case of contribution in R&D business development.

Activity: Name requested by <named aerospace contractor> to direct an effort in improving welding repair operations on critical castings.

Impact: Based on inputs provided, implementation of several recommendations concerning equipment and procedures are paying big dividends in reduced rework and improved quality.

Activity: Established <specified CRDA> between <lab organization> and <named university> **Impact:** Enabled the AF to cost-share the further development of its novel <specified> technology between DoD and industry. Sales of roughly \$55K resulted from this CRDA in the first year.

Factor: R&D Business Development – Some Not-So-Good Examples

Broadband I: Developed tools to form the basis for demonstrations, technical reviews, and marketing efforts for <technical area>. Provided unique, PC-compatible demonstration mode. What is the subject? What is the payoff? Does this fit R&D business development or technical problem solving?

Broadband I: Extensive background and knowledge of state-of-the-art developments in computer applications critical to <specialized technical area>. *Talents inherent in employees are not contributions*.

Broadband II: Actively seeks out interactions / collaborations (see above). Statements should not reference other statements. In a database, there is no fixed "below" or "above."

Broadband II: Successful <specified directorate> proposal. On what? For what?

Factor: Technical Problem Solving – Some Good Examples

Activity: Conducted an analysis of contaminated water samples for the Army Corps of Engineers which provided time-critical environmental contamination information on <specified site>.

Activity: Completed R&D strategic plans for new division focus areas (FY98-02) with minimal branch and division guidance. These plans are based on the HRC Defense Technology Objective, customer-identified deficiencies, and AF core research areas.

Impact: Plans resulted in over \$3M budgeted to new programs for FY98-02.

Activity: Designed and implemented study to demonstrate the impact of the mission ready technician training program on operational performance.

Impact: Use of the data saved over \$3M in a single course. Savings used to support stand-up of additional course, which would not have been funded in training budget projections.

Activity: Developed innovative scenario-based approach to aircrew performance measurement. **Impact:** Recent field tests resulted in laudatory letters of appreciation and \$200K in additional funding for further aircraft and aircrew position development. *In this example, the contribution (outcome) is in securing the additional funding; the laudatory letters merely add more weight to it.*

Activity: Employee conceived of and developed automatic mesh generation technology.

Impact: This extremely unique work will be incorporated into <named software> which supports DoD and industry aperture radar development efforts.

Activity: Developed innovative approach to identifying and forecasting training requirements for application in Air Intelligence Agency and Space Command.

Impact: This approach will provide these customers with near-real-time requirements identification and an entirely new capability to build career field education and training plans for personnel.

Activity: Solved thin coating inspection problems using the <specialized system>.

Impact: Thin coatings are a critical part of the materials and processes that our organization is developing...

Activity: Provided technical guidance and mentoring as a team leader to the team that successfully completed Electrostatic Discharge Testing on the TWA 800 mishap investigation. Led the in-house team that analyzed the TWA 800 hardware.

Impact: Analysis results have become the principal failure scenario being investigated by the NTSB. Technical guidance is a good example of a multifaceted contribution that can apply in more than one factor. In this case, the statement could support Technical Problem Solving, R&D Business Development and/or Tech Transfer.

Activity: Developed unique modeling process for evaluating how reticle-based IR seekers track extended targets and conceived of a field-test data collection process for correlating the model results to actual IR seeker performance.

Impact: As a result, this process was used to evaluate operational paint schemes for aircraft.

Activity: Created a unique process for correlating an IR seeker digital model to data based upon six different seekers of the same type.

Impact: Results will help determine how digital models are developed and validated in the future. A good example of how current year contribution can be interpreted from potential out-year benefit.

Factor: Technical Problem Solving – Some Not-So-Good Examples

PR DLTS implementation. What does this mean? Again, it is best to avoid cryptic jargon wherever possible. In this case, it is very difficult to even presume implied contribution.

The hydrogen dissociation efficiency was measured in three types of plasma sources. The data implies efficient conversion of low-grade energy to high-grade energy.

Independently defined, led, and managed challenging, innovative, technically complex and multidisciplinary activities in <tech area> consistent with general management guidance.

Factor: Technology Transition / Transfer – Some Good Examples

Activity: This employee provided technical expertise to the development and transition of an automated survey authoring and delivery tool to the Air Force.

Impact: Tool application to date has resulted in a 60% saving in the \$350K annual occupational analysis program budget. U.S. Army required use of this authoring tool in a current effort to identify common soldier skills. There is strong potential for this to be adopted as the default Army data collection tool, which would in turn eliminate the need for a \$10K site license for the COTS tool currently being used. *Contribution can also be measured in terms of benefit to other branches of the armed services.*

Activity: This employee worked with <other named directorate> on the <acronym> susceptibility test. **Impact:** This test is helping to build relationships across directorates that will result in more work and better utilization of advanced technologies. Data from this test will help designers of both military and commercial satellites understand how to mitigate EMI susceptibility of small satellites.

Activity: Initiated groundwork for CRDA arrangement involving the commercialization of the Permittivity Measurement Fixture developed contractual arrangement with <named contractor>.

Impact: This unique capability, upon commercialization, will provide state-of-the-art capability to measure the electrical properties of bulk materials over a wide band of frequencies, with more fidelity and less cost than presently available.

Activity: Maintained continuous contacts with AF procurement community to promote the use of in-house VHSIC Hardware Definition Language models as procurement specifications.

Impact: This in turn avoided unnecessary acquisition costs associated with the older, less accurate method of specifying VHSIC component acquisitions. *Appropriate use of acronyms. One does not need to understand the acronym in order to see the effort and resulting contribution.*

Activity: Works with several small-business innovative research groups who are developing new tools to monitor the flux from source ovens and the stoichiometry at the surface of growing films in a non-destructive fashion. **Impact:** This form of technology transition has speeded up the development of high-quality gallium-arsenide films and devices by improving film reproducibility and the understanding of the growth physics involved.

Activity: Served as key Air Force member of a DoD team developing a single process initiative for all weapon systems built by <named contractor>.

Impact: Estimated \$5M per year cost savings as a result of the implementation of this new process.

Activity: Broadband IV: <named employee> has been an inspiration in his organizing, leading, and marketing of the in-house research program, specifically in the area of <tech area>.

Impact: Extensive collaborations with < list of aerospace firms > have expanded our organization's opportunities for technology transfer in < tech area >.

Factor: Technology Transition / Transfer – Some Not-So-Good Examples

Integration of commercial products and software to military-unique needs.

Info on <tech subject> to <named industrial company>. Info to <other lab directorate> on effects of <tech subject>. Info/expertise shared with other divisions...

All of the not-so-good examples fail to show the impact of the contribution.

Summary

As these examples show, there are many good ways to document contribution under CCS. Hopefully, these examples have reinforced some ideas you may have already held, as well as introducing some new ones you may not have considered.

To write useful contribution statements, supervisors and employees need to modify their thinking from the "what" (the activity) and "how" (the level of performance) to the "why" (the benefit that helps meet the mission) and "who" (the customer). Remember to think in terms of cause and effect: "The employee did A that resulted in B which is related to the mission..." It is also extremely helpful to get employees to think in terms of this "formula" when it comes to providing their written contribution inputs.

As the AF Laboratory Personnel Demonstration matures, and we all mature with it, these ideas should become more and more natural for supervisors and employees alike. Finally, remember to interpret the factor descriptors broadly. Each employee is different, and brings his or her own unique style to the job.